Application Serial No. 09/827,358 – Filed April 5, 2001

## IN THE CLAIMS

Please add claim 74.

1. (Previously Presented) A receiver for processing data, wherein said receiver comprises:

a front end configured to receive a broadcast signal including a format definition expressed in a Bachus Naur Form, wherein said format definition comprises a description of a grammar which defines a syntax of a target language; and

a generic data processing engine configured to:

receive said format definition;

receive additional data which conforms to the target language; and process the additionally received data in accordance with the format definition.

- 2. (Previously Presented) The receiver as recited in claim 1, wherein the receiver is further configured to receive a broadcast including the received data.
- 3. (Original) The receiver as recited in claim 2, wherein the engine is further configured to receive the format definition from the broadcast.
- 4. (Previously Presented) The receiver as recited in claim 1, wherein the receiver is further configured to receive a broadcast including the format definition.
- 5. (Previously Presented) The receiver as recited in claim 1, wherein the receiver is further configured to receive a multicast including the data.
- 6. (Original) The receiver as recited in claim 5, wherein the engine is further configured to receive the format definition from the multicast.

- 7. (Original) The receiver as recited in claim 1, wherein the definition includes a description of a syntax of the format.
- 8. (Original) The receiver as recited in claim 7, wherein the definition includes a description of semantics of the format.
- 9. (Previously Presented) The receiver as recited in claim 8, wherein the semantic description associates at least one identifier with the received data.
- 10. (Original) The receiver as recited in claim 8, wherein the syntax and semantics are described in a first language.
- 11. (Original) The receiver as recited in claim 10, wherein the engine is further configured to produce an internal representation of the syntax and semantics.
- 12. (Original) The receiver as recited in claim 11, wherein the engine is further configured to receive a query and use the internal representation to create at least one mask.
- 13. (Previously Presented) The receiver as recited in claim 12, wherein the semantic description associates at least one identifier with the received data, and the query uses the at least one identifier.
- 14. (Previously Presented) The receiver as recited in claim 12, wherein the engine further comprises at least one filter operable to apply the at least one mask to filter the received data.
- 15. (Original) The receiver as recited in claim 14, wherein the engine further comprises a filter characteristics object including information about the at least one filter, and wherein the engine is further configured to use the filter information to select at least one filter to apply the at least one mask.

- 16. (Original) The receiver as recited in claim 14, wherein the engine is further configured to forward at least a portion of the filtered data to an application.
- 17. (Original) The receiver as recited in claim 14, wherein the engine is further configured to produce an additional mask, based on the filtered data.
- 18. (Original) The receiver as recited in claim 14, wherein the engine is further configured to modify the at least one mask, based on the filtered data.
- 19. (Original) The receiver as recited in claim 12, wherein the engine is further configured to receive a second query.
- 20. (Original) The receiver as recited in claim 19, wherein the engine is further configured to create at least one additional mask, based on the second query.
- 21. (Original) The receiver as recited in claim 12, wherein the query is formulated using the first language.
- 22. (Original) The receiver as recited in claim 12, wherein the query is formulated using a second language.
- 23. (Original) The receiver as recited in claim 12, further comprising a mechanism operable to execute an application that formulates the query.
- 24. (Original) The receiver as recited in claim 23, wherein the query is discrete.
- 25. (Original) The receiver as recited in claim 23, wherein the query is continuous.
- 26. (Original) The receiver as recited in claim 8, wherein the syntax is described in a first language and the semantics are described in a second language.

- 27. (Original) The receiver as recited in claim 26, wherein the engine is further configured to produce an internal representation of the syntax and an internal representation of the semantics.
- 28. (Previously Presented) The receiver as recited in claim 27, wherein the engine is further configured to receive a query and use the internal representation to create at least one mask.
- 29. (Previously Presented) The receiver as recited in claim 28, wherein the semantic description associates at least one identifier with the received data, and the query uses the at least one identifier.
- 30. (Previously Presented) The receiver as recited in claim 28, wherein the engine further comprises at least one filter operable to apply the at least one mask to filter the received data.
- 31. (Original) The receiver as recited in claim 30, wherein the engine further comprises a filter characteristics object including information about the at least one filter, and wherein the engine is further configured to use the filter information to select at least one filter to apply the at least one mask.
- 32. (Original) The receiver as recited in claim 30, wherein the engine is further configured to forward at least a portion of the filtered data to an application.
- 33. (Original) The receiver as recited in claim 30, wherein the engine is further configured to produce an additional mask, based on the filtered data.
- 34. (Original) The receiver as recited in claim 30, wherein the engine is further configured to modify the at least one mask, based on the filtered data.

- 35. (Original) The receiver as recited in claim 28, wherein the engine is further configured to receive a second query.
- 36. (Original) The receiver as recited in claim 35, wherein the engine is further configured to create at least one additional mask, based on the second query.
- 37. (Original) The receiver as recited in claim 28, wherein the query is formulated using at least one of the first language and the second language.
- 38. (Original) The receiver as recited in claim 28, wherein the query is formulated using a third language.
- 39. (Original) The receiver as recited in claim 28, further comprising a mechanism operable to execute an application that formulates the query.
- 40. (Original) The receiver as recited in claim 39, wherein the query is discrete.
- 41. (Original) The receiver as recited in claim 39, wherein the query is continuous.
- 42. (Original) The receiver as recited in claim 1, wherein the data comprises television-related information.
- 43. (Original) The receiver as recited in claim 42, wherein the data comprises service information.
- 44 −57. (Cancelled).
- 58. (Previously Presented) A computer program product for processing formatted data, comprising a computer usable storage medium having machine readable code embodied therein for:

receiving a format definition expressed in a Bachus Naur Form, wherein said format definition comprises a description of a grammar which defines a syntax of a target language;

configuring a data processing engine responsive to receiving the format definition; receiving additional data which conforms to the target language; and processing the additionally received data in accordance with the format definition.

- 59. (Original) The computer program product as recited in claim 58, wherein the definition includes a syntax definition of the format.
- 60. (Original) The computer program product as recited in claim 59, wherein the definition includes a semantics definition of the format.
- 61. (Original) The computer program product as recited in claim 60, further configured to produce an internal representation of the syntax and semantics.
- 62. (Previously Presented) The computer program product as recited in claim 61, further configured to receive a query and use the internal representation to create at least one mask for filtering the received data.
- 63. (Original) The computer program product as recited in claim 62, further configured to provide the at least one mask to at least one filter.
- 64. (Original) The computer program product as recited in claim 62, further configured to store filtered data returned by the at least one filter.
- 65. (Original) The computer program product as recited in claim 63, further configured to set a mask according to at least a portion of filtered data returned by the at least one filter.
- 66. (Original) The computer program product as recited in claim 63, further

configured to modify at least one mask according to at least a portion of filtered data returned by the at least one filter.

- 67. (Original) The computer program product as recited in claim 58, wherein the data includes television-related information.
- 68. (Previously Presented) The receiver as recited in claim 1, wherein the engine is further operable to receive a query and use said definition to create at least one mask for use in filtering the received data.
- 69. (Previously Presented) The computer program product as recited in claim 58, further configured to receive a query and use said definition to create at least one mask for use in filtering the received data.
- 70. (Previously Presented) A receiver for processing data, comprising:
  - a front end configured to receive a broadcast signal including a format definition expressed in a Bachus Naur Form, wherein said format definition comprises a description of a grammar which defines a syntax of a target language; and
  - a generic data processing engine configured to:

receive said format definition;

utilize the format definition to produce an internal representation of the syntax and semantics;

receive a query; and

create at least one mask for use in processing additional data, the mask being based upon said internal representation.

71. (Previously Presented) A computer program product for processing formatted data, comprising a computer usable storage medium having machine readable code embodied therein for:

receiving a format definition expressed in a Bachus Naur Form that comprises a

description of a grammar which defines a syntax of a target language; and processing data formatted according to the definition, without use of formatting information in the data;

wherein the definition includes a syntax definition of the format, and a semantics of the format, and wherein the code is operable to:

produce an internal representation of the syntax and semantics;

receive a query; and

use the internal representation to create at least one mask for filtering the data.

- 72. (Previously Presented) The receiver as recited in claim 1, wherein the processing engine comprises a format specification interface which includes a syntax initialization engine and a semantics initialization engine.
- 73. (Previously Presented) The receiver as recited in claim 72, wherein said syntax initialization engine includes a lexical analyzer and parser.
- 74. (New) A receiver for processing data, wherein said receiver comprises:

a front end configured to receive a broadcast signal including a format definition, wherein said format definition comprises a description of a grammar which defines a syntax of a target language; and a generic data processing engine configured to:

receive said format definition;

utilize said format definition to generate a decoder operable to decode said target language;

receive additional data which conforms to the target language; and process the additionally received data in accordance with the format definition using said decoder.